

WHAT IS THE ARIZONA WEST NILE VIRUS SURVEILLANCE PROGRAM?

The Arizona Department of Health Services (ADHS) has overseen a statewide mosquito-borne encephalitis surveillance program since 1974 for WEE, St. Louis encephalitis (SLE), and other viruses.

In 2000, ADHS and other agencies expanded the program to enhance the ability to detect WN virus. A protocol to report and test dead birds was added to the existing surveillance system.

Encephalitis Case Surveillance

ADHS and local health departments track cases of human and horse encephalitis. Human and animal encephalitis cases are routinely tested for WN, WEE, and SLE viruses.

Mosquito Testing

Mosquitoes throughout the state are sampled for the presence of WN, WEE, and SLE viruses. Local mosquito and vector control agencies also monitor the abundance and type of mosquitoes.



Sentinel Chicken Testing

Approximately 15 chicken flocks are strategically placed throughout the state and are tested routinely during the mosquito season to detect evidence of infection from WN, WEE, or SLE viruses.



Dead Bird Surveillance

Arizona began to test dead crows and related birds for WN virus in 2000. State agencies, private organizations, and individuals participate in the surveillance program by reporting dead bird sightings.

WHAT DO I DO IF I SEE A DEAD BIRD?

If you find a dead bird, please call your local health department promptly. Do not touch the bird. Health officials will provide additional instructions on how to submit birds for WNV testing, when appropriate.



PROTECT YOURSELF AND YOUR FAMILY

To decrease exposure to mosquitoes and the infections they may carry:

- Avoid outside activity at dawn and dusk during the mosquito season (May through October). This is particularly important for the elderly and small children. Wear protective clothing (long pants and long sleeves) and apply insect repellent when outside.
- Make sure that doors and windows have tight fitting screens. Repair or replace screens that have tears or holes in them.
- Drain all standing water on private property and stock permanent ponds with fish that eat mosquito larvae.
- Change water in flower pots, bird baths and pet dishes located outdoors at least twice per week.

For general information on West Nile virus call the State Public Health Hotline at:
602-364-4500 - Metro Phoenix
800-314-9243 - Statewide
Website: www.hs.state.az.us

Arizona Department of Health Services
1740 West Adams Street
Phoenix, AZ 85007



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If you need this publication in alternative format, please contact the ADHS Public Information Office at 602.542.1001 or 1.800.367.8939 (State TDD/TTY Relay).



ARIZONA SURVEILLANCE AND FACTS ABOUT

West Nile Virus



WHAT IS WEST NILE VIRUS?

West Nile (WN) virus is a mosquito-borne virus that was first detected in the United States (U.S.) in 1999. The majority of people and animals that are infected with the virus have a mild illness or no symptoms. In rare cases, the virus can cause a more serious condition called encephalitis, an inflammation of the brain.

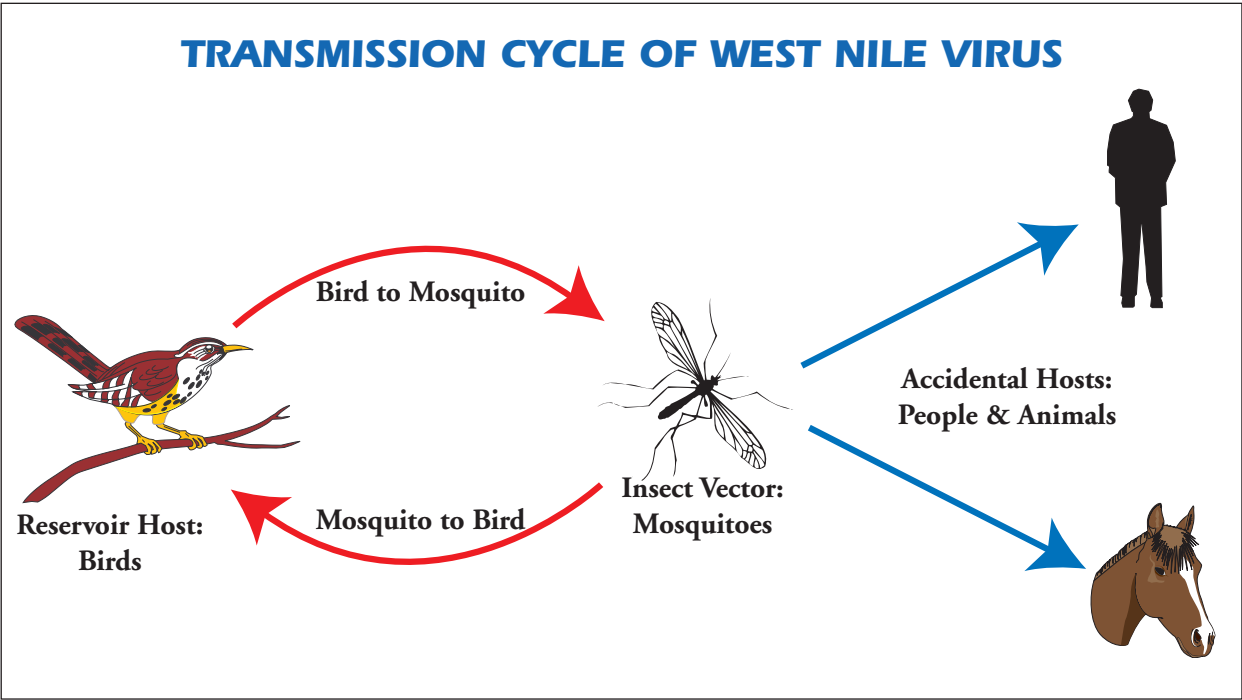
The elderly are at a higher risk for disease caused by WN virus.

HOW DO PEOPLE AND ANIMALS GET WEST NILE VIRUS?

WN virus is transmitted to people and animals by infected mosquitoes. Only certain species of mosquitoes carry the virus and very few mosquitoes are actually infected. A mosquito first acquires the infection by feeding on a bird with virus in its blood. The virus lives in the mosquito and is transmitted through the mosquito’s saliva when it bites a person or animal.

Humans and horses are accidental hosts for WN virus. Human-to-human transmission does not occur. The virus is most prevalent from May through October when mosquitoes are most abundant.

The chance of getting encephalitis is very rare. It is estimated that fewer than 1% of all mosquitoes will carry the virus, and fewer than 1% of the people who are bitten by an infected mosquito will develop encephalitis.



WHAT ARE THE SYMPTOMS OF WEST NILE VIRUS IN PEOPLE?

Most people who are infected with WN virus have no symptoms whatsoever. However, of those who become ill, symptoms can include fever, headache, nausea, body aches, mild skin rash. In a few cases, the disease will progress to encephalitis (inflammation of the brain).

The time between the mosquito bite and the onset of illness, known as the incubation period, ranges from 3-15 days in humans. It is estimated that 1 in 150 people who are infected with WN virus will require hospitalization. There is a 3% to 15% death rate in humans who develop encephalitis. The elderly are particularly susceptible to clinical illness caused by WN virus. There is no specific treatment for infection with WN virus, although supportive care is important.

WHICH ANIMALS CAN BE INFECTED WITH WEST NILE VIRUS?

An infected mosquito can bite any animal, but not all animals will become infected. The disease most often affects birds, horses and humans.

Birds

Wild birds are the animals from which the mosquito primarily acquires the virus. Infection has been reported in more than 70 bird species. Although many birds that are infected with WN virus will not appear ill, WN virus infection can cause serious illness and death in some birds. The most severe illnesses are seen among the corvid birds, which include crows, jays, ravens, and magpies. American crows constitute the majority of birds reported dead in the Eastern U.S. due to WN virus.



Horses

Horses are also susceptible to WN virus. The disease does not seem to be specific to a particular breed or age of horse. Clinical signs of disease consist of central nervous system abnormalities similar to those caused by infection with eastern equine encephalitis (EEE) and western equine encephalitis (WEE). EEE and WEE vaccines are available for horses and are recommended for use in the spring. An equine WN virus vaccine recently became available for horses. Contact your large animal veterinarian for vaccine recommendations.

